

# STRATEGIC PLAN

2020-2030



Prepared and Presented by Fire Chief Eric Kerska and the Rochester Fire Department SEPTEMBER 23, 2019

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As part of the Strategic Planning process, RFD teammates refined their Mission, Vision, and Values to better guide the department into the future. As part of the refinement process the City Foundational Principles and Strategic Priorities were used as a guide.

## City Foundational Principles

- Compassion
- Environmental stewardship
- Fiscal responsibility and sustainability
- Public safety
- Social equity

## City Strategic Priorities

- Enhance quality of life
- Foster a team oriented culture
- Manage growth and development
- Balance public infrastructure investment

#### Mission

Your Rochester Fire Department will compassionately solve problems that threaten life, health, and property.

#### Vision

RFD is the "Hand to Reach For" because:

- Our Skilled Teams Equipped with the training and tools to save lives and protect property.
- Our Positive "Can-Do" Attitude Servant hearts going the extra mile to do what is right.
- Our Compassion Treating people well is critical and expected.

#### **Values**

#### Teamwork

Combined efforts, or the actions of the group, to achieve a common purpose or goal.

#### **Dedication**

The quality of being dedicated or committed to a task or purpose.

#### Courage

The choice and willingness to confront agony, pain, danger, uncertainty, discomfort, or intimidation.





"Courage is being scared to death, but saddling up anyway."

- John Wayne



# MESSAGE FROM THE CHIEF

As the Fire Chief, I am pleased and proud to present the City of Rochester Fire Department Strategic Plan. This plan builds on the success and dedication of a deep history of service to the community and sets the direction for the department. It is the result of a lot of hard work by the Strategic Planning Team, input from members of the department and members of the community. I would like to thank everyone involved for their efforts in making this Strategic Plan a great success.

As a part of this work, an update to the department's Mission, Vision and Values occurred. The Strategic Plan is a guiding document that identifies where the department is headed in 2020 and into the future. The Strategic Planning process created an opportunity for leadership, employees and stakeholders to work collaboratively to establish a common understanding of the needed



direction of the department. The Strategic Plan will be consulted continuously, and reviewed with the Council annually, to measure each identified risk and the progress made on mitigating them.

Planning is essential for the success of any public or private undertaking. Strategic planning provides organizations with a collaborative, comprehensive plan to guide them. Without a well-designed strategic plan, an organization may waste valuable resources operating on a day-to-day basis without achieving results. Organizations embark on their strategic planning exercises by determining their vision for the future and addressing broad themes of common interest to all. This is not a financial plan. This plan provides the department direction. Funding a plan of this magnitude will not be easy. If adopted, we will work closely with City Administration and the City Council to find ways to allocate the resources needed to provide the capabilities we need now and will need in the future.

The Rochester Fire Department is known for providing excellent service to our residents. With this plan as our guide, I am confident we will continue to do so.

--Rochester Fire Chief Eric Kerska

Your Rochester Fire Department (RFD) will compassionately solve problems that threaten life, health, and property. This is the mission of the organization, which has proudly served the Rochester, MN community for over 150 years.

As we have worked to complete this strategic plan, we have identified a key attribute of RFD. That being, there may be a smaller fire department in the United States for a City of our size, but if there is one, we cannot find it. Rochester is a safe, but rapidly growing city. We are safe from a fire perspective, mostly because we are a "new" city structurally and have widespread modern fire protection.

Due to the efforts of former Fire Chief Ollie Mertz, Rochester became a national leader in fire protection in the 1970s, adopting strict sprinkler ordinances before most other cities. The early adoption of sprinkler ordinances, as well as our relative affluence, has allowed the fire department to stay small as compared to other cities of our size. We are in the enviable position to choose the size of our fire department based on actual needs. This is a tremendous opportunity.

In addition, while fire risk has gone down, RFD now offers many more core services than it did for much of the 20th Century. The eight companies that serve the City not only fight fires and provide first response emergency medical services (EMS), they are also relied on for natural gas and electrical emergencies, vehicle extrication, technical rescue (water, ice, rope), hazardous materials, structural collapse, hostile event triage, public education and a host of other services. So, while we do not fight as many fires as in the past, the reliance on the services we provide continues to grow.

The citizens of Rochester feel safe from a fire department perspective, and we have been safe for many years, yet we face risks that will challenge our ability to remain safe. These risks include increasing call volume and population, inadequate commercial building inspections, inadequate internal support structure, single-incident capability, mutual aid, and increasing response times. Additionally, it is important to note that while we have great sprinkler protection in newer buildings, 55% of our commercial buildings and nearly 100% of our single family residences are without sprinkler

protection.

# **EXECUTIVE SUMMARY**

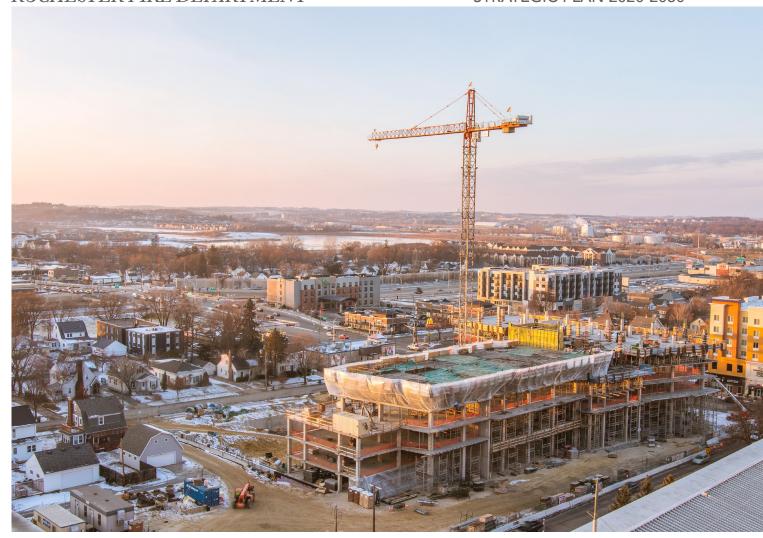
Because of the demands of growth, our Fire Marshal professionals focus almost exclusively on new construction. The need to focus on new construction means our legal responsibility to inspect existing buildings is not being fulfilled.

We also lack the internal support structure needed to keep up with the demand of our growing city. We cannot do so without more support in the areas of Training, Administration, Emergency Management, Fleet, Safety and Leadership.

With 8 companies available, we are only able to conduct one major incident at a time. Additionally, this number of resources means we cannot provide a true second alarm at a typical major incident. This is compounded by the fact that our surrounding communities lack the resources to help us with adequate personnel in a timely manner.

Geography, more tall buildings, and call volume all contribute to an increase in response times. A fire department's primary goal is to reduce response times to the customer. It is important to understand that response times are not determined only by horizontal distances. Response times are determined by horizontal distance, vertical height of buildings, and the volume of demand on the fire companies. When a fire company's calls for service increase, so does the likelihood they will be unavailable for additional calls in their service area, essentially doubling response times waiting for the next nearest available company.

All of the planning projections that we have reviewed make us confident that we need to prepare for the impacts of City growth that are coming. By starting now we can implement over time the internal support structure necessary to support the department capability needed for predicted demand, while also mitigating the risks we have now.











# **ROCHESTER IS BOOMING!**

Rochester has long been one of the most desirable cities in the United States in which to live and work. With the arrival of the Destination Medical Center initiative and the growth it is **already** generating, our City will continue to see a substantial increase in the number of people who come here to live, work, and seek medical care.

The key word here is "already." The 20-year economic development initiative began in earnest in 2015 and the construction cranes that have lined the City's historic skyline ever since are testament to the growth that has already begun.

There are three significant numbers from the Planning 2 Succeed Rochester Comprehensive Plan that drive our strategic plan and future needs:

24,000 new housing units 55,000 new residents 50,000 new jobs

# What does this mean for the Rochester Fire Department?

- Thousands of additional calls for service
- Tens of thousands of additional lives to protect
- Hundreds of millions of dollars in new property to protect



WHAT MAKES ROCHESTER UNIQUE

Rochester really is a city like few others, and this affects the Rochester Fire Department in significant ways:

 Daily Influx: With all of the workers and visitors that come into Rochester, the noontime population balloons from 119,000 to 160,000 each day. By 2040, that noontime number is projected to be 217,000.



- Mayo Visitors: Tens of thousands of visitors each week are here for medical care and stay in hotels and other lodging facilities. The nature of their medical conditions often requires 911 first response emergency medical services (EMS) from RFD to these facilities.
- On An Island: Unlike other large city fire departments, Rochester is on an "island" when it comes to available assistance from neighboring fire departments (FD). While we greatly value our partnerships with nearby FDs, many other larger cities such as Minneapolis, St. Paul, and the metro suburbs in Minnesota have the benefit of calling for mutual aid from large, fully-staffed fire departments for large or multiple incidents. Based on our geography, Rochester simply does not have this same opportunity.
- Specialized Response in SE MN: Along with protecting our own City, RFD covers
  Southeast Minnesota with specialized teams in hazardous materials and structural
  collapse. These teams are organized by the State of MN, but are fully staffed and
  administered by RFD teammates who are already on regular duty every day of the
  year.
- The Windy City: According to the National Centers of Environmental Information, Rochester is the second-windiest city in America with a population over 100,000. This is significant to RFD's fire response capabilities, as there are few things more dramatic than a wind-driven fire. It's important for the safety of firefighters and the public to get a handle on these fires as quickly as possible.
- Cardiac Arrest Survival Rate: According to Dr. Roger White, in the past several years, Rochester's cardiac arrest survival rate has been the highest in the nation, due to the quick response and high level of training of RFD and the Rochester Police Department.

# STRATEGIC PLANNING

Beginning in October 2018, Fire Chief Eric Kerska and the teammates of RFD and Human Resources undertook a comprehensive strategic planning process. Each of the department's divisions (listed below) presented a functional analysis of their assigned duties, which provided a clear picture of what is being accomplished well, what is partially being accomplished and what is not being accomplished. Discussions occurred regarding the future needs and functionality of each division.

#### **RFD Divisions:**

- Suppression
- Administration
- Fire Marshal
- Training
- Fleet
- Emergency Management

Each of the 6 divisions accomplish the department mission by focusing on their role in our public safety responsibilities—Prevent, Prepare, Respond and Recover.

A diverse group of teammates from each of these divisions met monthly. Chief Kerska and the three shift Battalion Chiefs met continuously with teammates of the department throughout the process to solicit feedback and input. Three community feedback sessions were held, which helped gain valuable input from the community.

As part of this process, the Strategic Planning Team conducted a SWOT analysis. A SWOT analysis is a strategic planning technique that assists an organization in identifying its Strengths, Weaknesses, Opportunities, and Threats. The goal in each category is to assist the organization in:

- Building on its strengths
- Identifying and improving on its weaknesses
- Proactively addressing its opportunities
- Overcoming its external threats



## **ISO** Ratings

RFD has a rating of 3 from the Insurance Services Office (ISO 3). While there is little economic benefit to improving our rating to ISO 2, allowing our rating to decline to an ISO 4 would have a negative economic impact on many of our largest employers, as well as many property owners within the City. Many factors go into an ISO rating, including but not limited to, staffing, training, public education, tools and equipment. Distances from customers to the nearest Ladder Company and Engine Company are the primary factors that will threaten our ISO 3 rating as the City grows in geographic size. Simply put, as the City grows upward and outward, we need to ensure the proper resources can get to all areas in adequate time to satisfy ISO 3 requirements.



The Rochester Fire Department provides a long and varied list of services to the residents and visitors in our community.

Below is a list of those services, divided into two categories:

<u>Core Services</u> - Those services that are central to the mission of RFD.

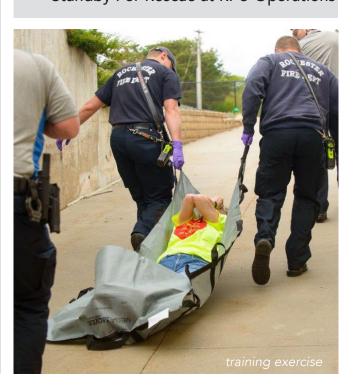
<u>Value-added Support Services</u> - Those services that RFD provides that are not central to the mission but provide value to the community.

#### CORE SERVICES - Only we can do

- Fire
- First Response Emergency Medical Service
- Emergency Management
- Vehicle Extrication
- Ice Rescue
- Water Rescue
- Rope Rescue
- Active Shooter Victim Removal and Triage
- Lift Assist
- Trench Rescue
- Construction Site Rescue
- Public Education
- Code Enforcement/Investigation
- Hazardous Materials Response
- Structural Collapse Response
- Natural Gas/LP Emergencies
- Elevator Rescues
- Hot Zone Medical Care
- Airport Response
- Carbon Monoxide Calls
- Fire Apparatus Maintenance
- Mutual Aid
- Unusual Odor Calls
- Animal Rescues
- Property Loss Stop (Water Evacuation, Secure a Roof or Window)
- Mayo Clinic Ambulance Support (Driving/Building Access/Heavy Lifting)
- Assist Medical Examiner With Deceased Persons

#### **VALUE-ADDED SERVICES**

- Traffic Control and Blocking
- Public Event Support/EMS (Road Races, Outdoor Concerts, etc.)
- Township Fire Coverage
- Power Line Calls
- Maintain Our Own Equipment (Apparatus, SCBA, Ladders, PPE, etc.)
- Community Outreach
- Station Maintenance/Lawn/Cleaning/ Snow Removal
- "After the Fire" Books and Bears
- Public Service Calls
- Positive Public Image for the City of Rochester
- Assist All Other City Agencies
- Standby For Rescue at RPU Operations



As RFD looks to the future, there are a few steps we have taken in the past several years to streamline our response profile and improve our operational and environmental efficiency, without impacting public safety. These include:

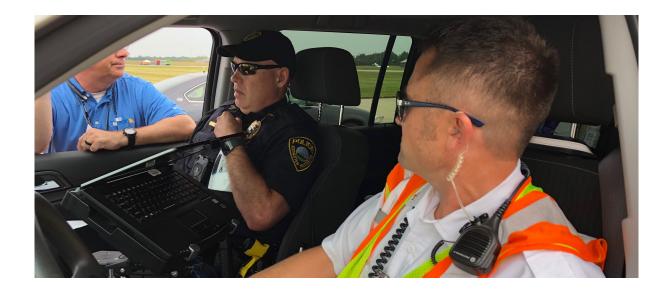
**EMS Algorithm:** RFD launched a highly effective algorithm-based dispatching system in 2018. The algorithm was designed with the supervision of RFD's Medical Director, and intended to filter out non-emergency 911 calls in which RFD brought no added value. Since implementing the algorithm in June 2018, the fire department's EMS responses have been reduced by **20**%.

**Fire Alarm Response:** Residential and commercial fire alarms traditionally received a response of 2 Engines, 1 Ladder, and the Battalion Chief. In recent years, that was reduced to 1 Engine, 1 Ladder, and the Battalion Chief. And in 2018, the Battalion Chief was also removed.

**Code 2 (no lights and sirens) Response:** In the past few years, RFD has moved away from responding to all calls with lights and sirens (aka Code 3). Captains on responding apparatus now have discretion to respond Code 2, if the call notes do not appear to warrant an emergency response. This change has resulted in more responsible navigation of Rochester's roadways, which is safer for motorists and pedestrians with whom we share the road.

**Temporary Promotions:** The Training and Emergency Management divisions each added a Captain on a temporary basis, using overtime, to assist with increasing workloads.

**Safety Officer Pilot Program:** RFD piloted a Safety Officer for six months in the past year. A Captain was temporarily assigned on each shift to assist the Battalion Chiefs with daily duties and emergency response.



Rochester has seen its population grow by 50,000 since 1967, but RFD has only added one company in that same time. When that company was added it was put into service by adding nine personnel to the department to maintain the minimum daily staffing of three. We know that to avoid overtime associated with planned and unplanned absences requires four personnel be assigned to a company to maintain the minimum daily staffing of three. We have since added two firefighters and are recommending adding one additional firefighter. This additional firefighter will help with overtime expenses by having four personnel assigned to every company to maintain the minimum daily staffing of three personnel per company.

We have not found another city the size of Rochester with a fire department as small. According to the U.S. Fire Department Profile 2017 published by the National Fire Protection Association, Midwest cities with populations of 100,000-249,000 have a median of 1.42 firefighters per 1,000 population. The same report noted cities with 25,000-49,999 populations have a median of .91 firefighters per 1,000 population. The Rochester Fire Department currently has .82 firefighters per 1,000 population.

However, comparisons to other cities are not helpful and were not used to determine the capability needed for future demand. Future resource needs will be driven by calls for service, incident response times, and ISO rating. Geographic expansion and infill will have an affect on both response times and ISO rating. Increasing calls for service affect response times as well.

Historical Calls for Service Breakdown	2015	2016	2017	2018
Total Fires	237	192	167	166
Rescue/EMS Responses	6,338	6,644	6,840	6,631
HazMat and Other Hazardous Responses	168	171	166	200
Other Responses (Public Service, Assist LE, False Alarms, Mutual Aid)	3,022	3,107	3,116	3,019
Total Calls for Service	9,765	10,114	10,289	10,016
Suppression Staffing	93	94	98	98
Calls for Service per Firefighter	105	108	105	102

Predicted Calls for Service	2020	2025	2030	2040
Total Calls for Service	9,922	11,484	13,156	16,830
Current Suppression Staffing	98	98	98	98
Calls for Service per Firefighter	101	117	134	172

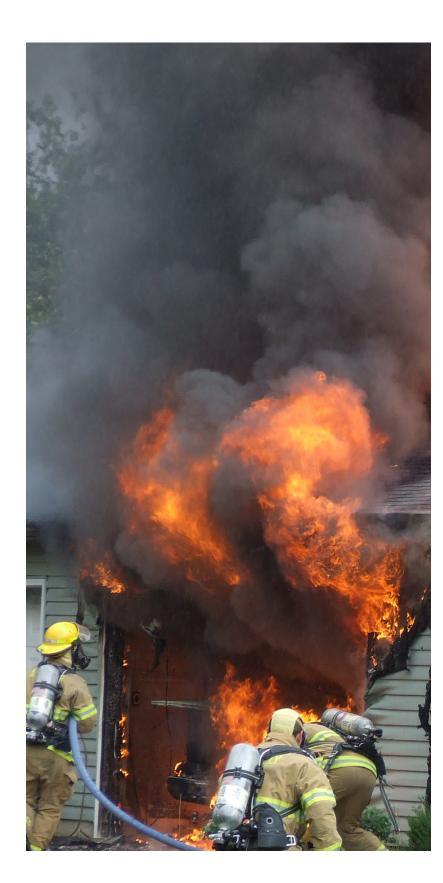
See Appendix B for detailed Calls for Service projections and Appendix C for larger tables.



Based on RFD's current responsibilities, the City's projected expansion and the functional analysis of each departmental division, five risks were identified. These risks pose the most significant challenges to RFD's ability to continue to provide safe, consistent and exceptional service to our residents and visitors.

- 1. Fire Prevention
- 2. Span of Control/Safety
- 3. Single Incident Capability
- 4. Divisions of One
  - a. Training
  - b. Emergency Management
  - c. Fleet
- 5. City Growth Impacts





#### 1. Fire Prevention

Commercial buildings need to be inspected beyond initial construction on a frequent basis.

The Fire Marshal Division has State Statute responsibilities for a commercial building from the concept phase until demolition. Currently, The Fire Marshal Division focuses nearly all its resources on new construction. The rapid growth of the City, and the demands that development not be delayed, does not allow the Division to focus on other State Lawmandated tasks. Other tasks beyond new construction are not being done, simply because we do not have the people to perform the tasks.

Administrative requirements also continue to increase as the City grows. The department has had two Administrative Assistants since the 1980's. Strategic planning identified the requirements and assessed Administration's effectiveness with the workload and identified gaps in capacity to accomplish our mission. The addition of responsibilities over time has made it impossible to accomplish all the requirements. As the City grows and the Fire Marshal completes more requirements, the administrative support requirements for the Fire Marshal Division will grow in the areas of permits and violation notices.

## Risk Mitigation Solutions

Additional people and leadership are needed in order complete the tasks that are required by State Law.

a. The City lacks a dedicated Fire Marshal to focus on community risk reduction. Currently, we are staffed with an Assistant Fire Marshal that is appointed as the acting Fire Marshal. Unfortunately, because of the demands of new construction this person's focus is on completing tasks rather than providing leadership to the Division and keeping their focus on the community as a whole.

Recommend the appointment of a Fire Marshal. A Budget-neutral Decision Package was submitted and is included in the 2020 recommended budget.



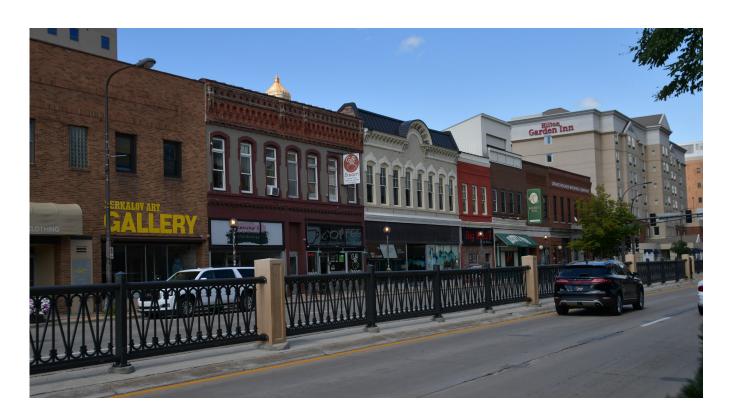
## 1. Fire Prevention (continued)

b. An additional person is required to complete the work necessary in our rapidly growing city. This person will provide the Fire Marshal Division the capability to do existing building inspections, annual permit inspections and mobile food unit inspections. This person will help mitigate the risk of fire prevention activities not being accomplished.

Recommend hiring one additional person bringing the Fire Marshal Division from three people to five people. A Budget-neutral Decision Package was submitted and is included in the 2020 recommended budget.

- c. Public education is considered a critical function of the Fire Marshal Division. However, even with two additional people including a dedicated Fire Marshal, public education activities will not be possible given the current demands. Without additional personnel in the Division we will be forced to shift public education activities from the Fire Marshal Division to the Suppression Division for the time being.
- d. An Administrative Assistant I is needed in order to complete the tasks that are required. Having an Administrative Assistant I to do more of the routine tasks including commissary management, answering phones and front desk customer service will free up capacity with our current Administrative Assistant II positions.

Recommend appointing an Administrative Assistant I. Due to a staffing restructure in 2019 a Decision Pack, based on the 2019 budget post restructure, was submitted for the 2020 budget. This will mitigate this risk if approved.



# 2. Span of Control/Safety

Leading a high-functioning team of humans who routinely operate in life-threatening environments, armed with imperfect information is as complex as it gets.

RFD Shift Battalion Chiefs currently have eight direct reports spread out over five fire stations. The term span of control is used to quantify the appropriate number of direct reports that a leader can effectively supervise. In the fire service, military, and law enforcement the span of control range is 3-7, with the ideal being five direct reports. Span of control is affected by the type of work being done, the level of risk involved, the experience level of the direct report, and the geographic orientation between the supervisor and direct report. Several factors that affect the ability of the Battalion Chiefs to successfully complete their functional responsibilities were identified by the Suppression Division analysis. Those factors included having eight direct reports which is over the recommended span of control range, having them spread throughout the City, and the amount of administrative work required. Team-building and leadership are also challenging in the current department structure due to the workload on the Battalion Chiefs.

The industry standard calls for a dedicated Safety Officer at structure fires and other highrisk calls. Without a dedicated Safety Officer, the responsibility falls back on an already overtaxed Battalion Chief. There is only one Battalion Chief on shift each day, which means that an off-duty Battalion Chief needs to be called back in to oversee the City or cover a second incident while the on-duty Battalion Chief is engaged.

## Risk Mitigation Solution

The span of control of our Battalion Chiefs must be reduced in order to build stronger teams, and keep our citizens and firefighters safe. The increasing demands will require more companies in the future adding to the already strained span of control. As an interim step to help mitigate this risk we recommend appointing a Captain to work as a Battalion Chief's Aide on each of the three Battalions. This positon will not only add administrative capacity helping with span of control issues, but also be able to act as the Incident Safety Officer on emergency scenes. We cannot add additional companies in the future without transitioning these positions to Battalion Chiefs, at which time, an Assistant Chief will also be needed to maintain span of control throughout the organization. These Battalion Chiefs will allow the department resources to be split into two Battalions on duty each day. This will mitigate the risk by ensuring appropriate span of control allowing for more effective supervision, leadership, and team building. Additionally they will also be able to operate as an Incident Safety Officer on emergency scenes where the other Battalion Chief is in Command.

Recommend appointing a Captain to work as a Battalion Chief's Aide on each Battalion by 2021. This would be an interim step to mitigate this risk until these positions are transitioned to Battalion Chiefs.

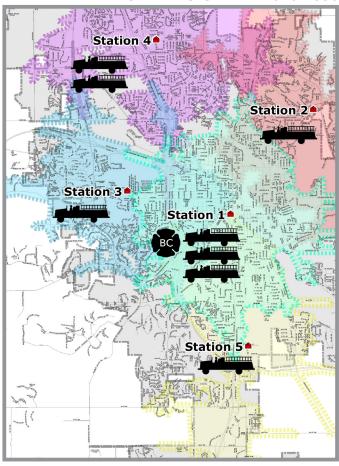
# 3. Single Incident Capability

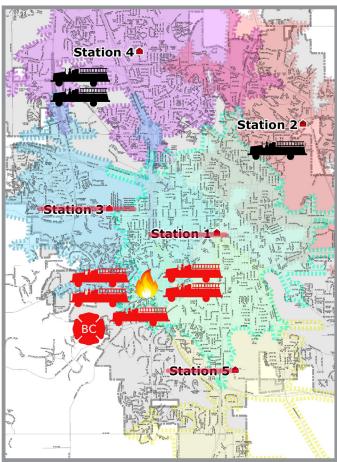
## Help may not be on its way

RFD operates eight frontline apparatus and one Battalion Chief every day. The standard response to a residential structure fire is five apparatus and one Battalion Chief, which leaves three apparatus covering the City for all other calls for service.

The resources provided in the standard response are sufficient to cover a residential structure fire, but additional apparatus and personnel may be required depending on incident factors. Large fires, extended-duration incidents, and other high-risk incidents will require additional resources and possibly an immediate second alarm. Typically a second alarm is a doubling of the first alarm resources, but currently the second alarm resources for RFD consists of the three remaining companies. Having second alarm resources is most important to address the limitations of human endurance. Even under optimal weather conditions, the first alarm personnel need rehabilitation and relief within an hour.

Currently, additional resources come from callback of off duty RFD personnel and mutual aid, which can be too little, too late.

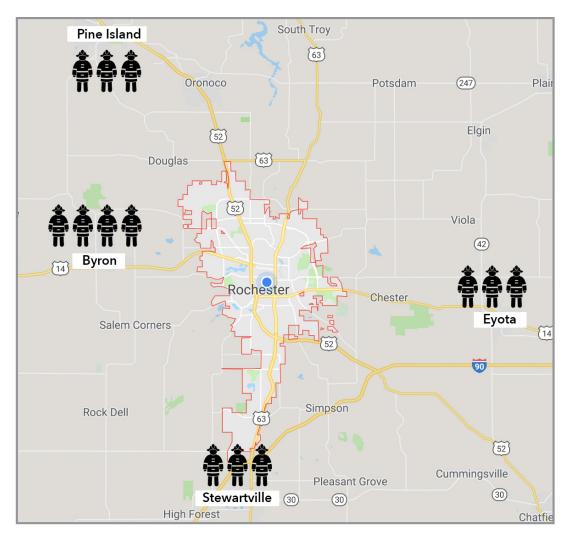




# 3. Single Incident Capability (continued)

If off duty RFD personnel are available to come in for callback it can take up to an hour to get callback crews into service. In 2018 RFD called back off duty personnel for incidents 13 times.

Unlike metropolitan fire departments we are geographically on an island. This affects our ability to get aid from surrounding communities. The graphic below shows what our neighboring communities have committed to being available for mutual aid when we need help. Though we greatly appreciate our mutual aid partners, and are continuing to work with them to improve mutual aid capabilities, this number of personnel and the timeliness of their response does not provide second alarm capability. Additionally, the current processes and systems that are in place only allow us to utilize their resources for fire incidents.





## **Risk Mitigation Solution**

# 3. Single Incident Capability (continued)

Having the ability to mitigate two multi-company incidents simultaneously or the capability to add a second alarm to one complex incident is a capability the City needs. The ability of our mutual aid partners to send us enough help and in a timely manner is extremely limited. The department has begun discussion of future training with our mutual aid partners to maximize the benefits from mutual aid. This will help, however, the numbers of people they are able to provide will not get us the capability the City needs. Additionally, our ability to form crews with off duty personnel takes too much time.

Adding one firefighter to each Ladder Company will provide for the formation of a "B" Team. The formation of a "B" Team means we will have two teams of two firefighters for minimum staffing of our two Ladder Companies versus our current one team of three. If staffed, this would allow us to send four companies to a major incident instead of the current five companies. Under this model, the number of firefighters per incident declines from 16 to 14, but we maintain the needed five teams with the Ladder Companies providing two teams. The formation of the "B" Team is an interim step to help mitigate this risk until such time in the future that City growth impacts require ten fire companies. When RFD reaches ten fire companies this risk will be mitigated as ten companies provides the capability of a full second alarm and the capacity to respond to two simultaneous incidents.

#### Recommend approval of 6 firefighters to form a Ladder Company "B" Team by 2023.



#### 4. Divisions of One

RFD must keep up with demands of our growing City. However, we cannot do so without first building up our support structure in the following divisions.

#### a. <u>Training</u>

The complexities of our mission require an effective training program. Because we are a small department, being well trained is critical to our success. Training helps us be more effective and safe in the hazardous situations we deal with daily. Currently our Training Division consists of one person. One person does not make a system, especially when planned or unplanned absences occur. Overtime is used to augment this one person because the workload exceeds what can be accomplished by only one. The workload demands consist of:

- Federally required 300 hours of training per year per Firefighter
- Training curriculum development
- Recruit Academy twenty weeks per year there is a need to have a Captain move off of shift to run the Recruit Academy, breaking up the team and creating overtime
- Documentation workload for re-certifications, and legal requirements

## **Risk Mitigation Solution**

An additional person is needed in the Training Division in order to complete the tasks that are required. Having a Captain assigned to training will allow us to run a recruit academy without spending overtime money for 20 weeks per year, and avoid negatively impacting a suppression crew by pulling away its Captain. This Captain position would also be able to help address the functional needs of training throughout the remainder of the year. Additionally, this will be a Captain position that is rotated every three years, providing a growth opportunity which will assist with succession planning.

Recommend maintaining this Captain position using overtime until the appointment of a Captain position in the Training Division by 2024.



## 4. Divisions of One (continued)

#### b. **Emergency Management**

Disaster has visited our City in the past and likely will again. The Office of Emergency Management consists of one full-time staff member. Rochester Code of Ordinances Chapter 8-1 lists the duties for the Office. As part of the strategic planning process, these duties were analyzed against State of Minnesota planning requirements and Emergency Management Accreditation Program (EMAP) standards. While Minnesota planning requirements were met, there were several areas uncovered by the comparison with EMAP standards that reveal more work is needed. This was especially noted in the area of Emergency Operations Center (EOC) response operations, and with line of succession.

Chapter 8-1 Emergency Management states two Deputy Directors are to be named as successors (8-1-3), and that these successors are trained to perform duties in the absence of the Director (8-1-4-(1)). Currently, successors named in the Emergency Operations Plan are the Fire Chief and Deputy Fire Chief. While training has been provided to the successors, it is not nearly enough to ensure good continuity. Planned and unplanned absences of the one assigned person are a setback to the program. In 2019, a Fire Captain was temporarily assigned to the Office of Emergency Management. Early results show response operations have improved. The EOC Watch Officer, a position that provides early activation of EOC response, is being fully implemented. Extra capacity for training and exercises has been created.

## Risk Mitigation Solutions

An additional person is needed in the Office of Emergency Management in order to complete the tasks that are required. Having a Captain assigned to the Office of Emergency Management will allow us to provide continuity, increase speed of preparation, and better facilitate the "Watch Officer" concept. Assigning a Captain accomplishes these things without negatively impacting a suppression crew by pulling away its Captain and spending overtime money to provide this capability. Additionally, this will be a Captain position that is rotated every three years, providing a growth opportunity which will assist with succession planning.

Recommend maintaining this Captain position using overtime until the appointment of a Captain position in the Office of Emergency Management by 2024.

The temporary Captain assignment to the Office of Emergency Management has demonstrated a slight realignment is needed to move from an Office of Emergency Management to a Division of Rochester Fire. Rochester Fire has always treated the Office of Emergency Management like it is a Division. As a Division, there is greater flexibility to provide depth of bench, and integrate emergency management functions into fire operations. It will also provide more financial flexibility.

Recommend making the Office of Emergency Management a business unit of the Fire Department.

## 4. Divisions of One (continued)

#### c. Fleet

The Fleet Division reviewed the specialized training and testing that is involved in being an Emergency Vehicle Technician, which is required due to the complexity and unique requirements of managing and maintaining the Rochester Fire Department fleet. There was also a review of the apparatus that the Fleet Division is responsible for, as well as the division's current ability to handle the workload presented by the fleet. There are certain functions that the Division sends to outside contractors, but it has been found that most fleet maintenance and repair is handled in-house more economically and efficiently when compared to waiting on contractors to schedule and complete the work.

Being a Division of one does not allow for any level of redundancy, and thus when the Technician is off for any reason, emergency fleet repairs that arise wait until their return. Planned and unplanned absences also impact the ability of the Division to carry out scheduled preventative maintenance and required apparatus certification testing.

#### **Risk Mitigation Solutions**

An Assistant Technician is needed in order to complete the tasks that are required of the Division. Having an Assistant Technician assigned will allow us to provide continuity of maintenance and testing during planned and unplanned absences, reduce the out of service repair time, and better facilitate the documentation of requirements. Currently, one Technician struggles to maintain the existing fleet. As the fleet grows and begins moving toward hybrid and electrical vehicles, one Technician will simply not be enough to support the fleet. The specialized training needed to serve as an Emergency Vehicle Technician makes having depth in the Division all the more important.

#### Recommend appointing an Assistant Technician by 2024.







## 4. Divisions of One (continued)

#### Why Big Red Trucks?

We often hear the question of why we use big red trucks to go to non-fire calls. We could choose to purchase 8 lighter vehicles for our crews to respond to non-fire calls, but there is a risk. Maintaining our ISO 3 rating requires us to have 8 big red trucks. There are 27 services the fire department provides that currently no other agency can provide. We must be prepared to conduct all 27 of these tasks without warning. If we take our teammates away from the fire apparatus, our access to those necessary tools is reduced resulting in increased response time. When a police officer responds to a medical, we do not require them to leave their gun, body armor and citation book at City Hall for the same reason. Additionally, adding 8 additional vehicles to an already strained maintenance program would not be helpful. We also have been unable to determine the carbon footprint to build eight additional 1-ton trucks.

Our latest fire truck purchase will be delivered with idle control which will significantly reduce our carbon footprint for that truck. The industry is developing hybrid fire engines and fire trucks that we feel could be very effective given the driving and idling conditions we face. We estimate that hybrid technology for fire apparatus will be widely available from the industry in the next five years. This will allow the department to replace aging diesel fire trucks with electric hybrids in the near future.

Recommend continuing to respond to all of our calls using our fire apparatus while we wait for hybrid vehicles to become available from the industry.



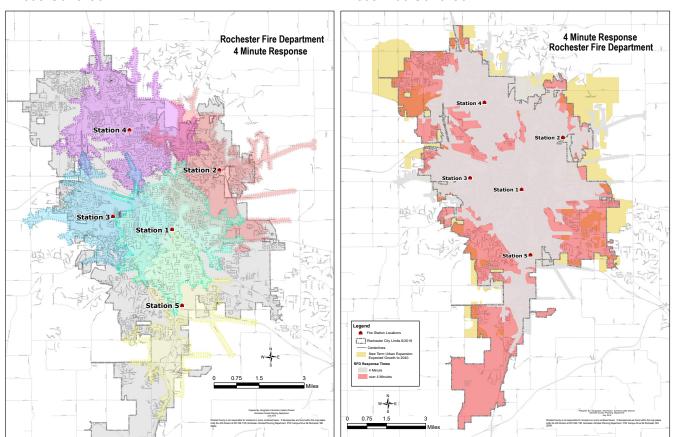
# 5. City Growth Impacts

If City growth projections are accurate two additional fire companies and stations will be needed after 2030.

Per National Fire Protection Association 1710, a fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 4-minute travel time to 90 percent of incidents. Currently we meet that 4-minute standard 55% of the time. Response times are affected by many factors including horizontal distance, vertical height of buildings and the volume of demand on the fire companies.

We currently have areas within the City that are not within four minutes for RFD response, with more areas projected to be developed by 2040. Additionally, RFD response times will continue to be affected as the City continues to grow, not only out but also up. Infill poses problems for response. In addition to road travel time, accessing upper floors will take significantly more time.

#### Areas Covered Areas Not Covered



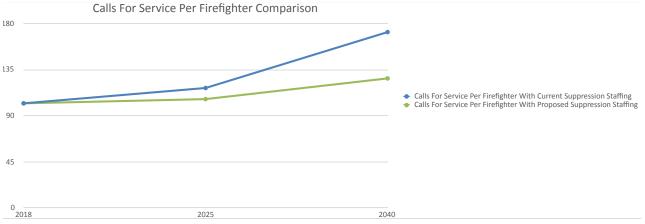
See larger maps for RFD 4-Minutes Response Areas in Appendix D.



## 5. City Growth Impacts (continued)

We are projecting, based on our historical calls for service data, that RFD call volume will continue to rise as the population increases. When a fire company's calls for service increase, so does the likelihood they will be unavailable for additional calls in their service area, essentially doubling response times waiting for the next nearest available company. It will also be important to monitor the calls for service demand on each company. As companies approach 2,500 calls for service annually we know that system stress increases and there will likely be an effect on response times. The first company projected to exceed that number is Station 3 in 2033. See Appendix B for detailed projections.

For the twelve months following our EMS algorithm implementation RFD responded to 9,552 calls for service. We are projecting call volume to rise to 13,156 calls for service by 2030 and 16,830 calls for service by 2040.



See additional detail in Appendix G.

#### **Risk Mitigation Solutions**

We could improve response times now by relocating existing companies, from multi-company stations, to new station locations near areas that are over 4-minute response. Though this would improve geographic coverage this is not recommended due to additional complications it would cause. Moving these companies would worsen our span of control issue and increase infrastructure maintenance costs. There are also too many unknowns about location and call volume impacts of future development to ensure that station locations selected now would most effectively meet future demands. We recommend waiting and evaluating what the actual City growth impacts are.

In Phase II, discussed in the Mitigation Summary, we will begin to research potential station locations. Future fire companies will be asked for when the data and plan review show they are needed based on calls for service, incident response times, and ISO rating. In Phase II we will monitor these issues and compare what is actually happening to the City growth and RFD calls for service projections. This will allow us to keep the Council informed of trends, and seek additional resources when and where they are necessary.

Recommend maintaining our current resource deployment, and adding additional companies and stations based on calls for service, incident response times, and ISO rating.

# RISK MITIGATION SUMMARY

### PHASE I 2020 - 2025

- 1. Fire Prevention
- 2 Fire Marshal Division
- 1 Administrative Assistant
- 2. Span of Control/Safety
- 3 Battalion Chief's Aide Captains (Interim Step)
- 3. Single Incident Capability
- 6 Firefighters for B-Team (Interim Step)
- 4. Division of One
  - 1 Training Captain
  - 1 Emergency Management Captain
  - 1 Assistant Technician

#### 2020

#### Risk 1

- 2 Fire Marshal Division
- 1 Administrative Assistant

#### 2021

Risk 2
• 3 Battalion
Chief's Aide
Captains

#### 2022

Risk 3

• 3 Firefighters

(B Team)

#### 2023

Risk 3
• 3 Firefighters
(B Team)

# **2024**Risk 4

- 1 Training Captain
- 1 Émergency Management Captain
- 1 Assistant Technician

#### 2025

Add 1 Firefighter Position\*\*\*

\*\*\*This is the additional firefighter discussed on p. 13, not discussed under risks.

## PHASE II 2026 - 2040

# 2. Span of Control/Safety

- 3 Battalion Chief's Aides become Battalion Chiefs
- 1 Assistant Chief (Final Mitigation)

## 5. City Growth Impacts

## Estimate the Need for 2 Additional Companies

- Monitor City Growth Impacts on:
  - Calls for Service
  - Response Times
  - ISO Rating

# 3. Single Incident Capability

2 Additional Companies and Stations (Final Mitigation)

For a list of positions and an estimate of associated costs see the Risk and Mitigation Quick Reference in Appendix F.

# FUTURE OF YOUR RFD

In addition to the 5 risks already outlined, there are other important challenges that must be addressed to keep the organization healthy during this time of rapid change. These do not require City Council action at this time. We must further define these challenges before we are ready to ask for help.

- Professional Development of Existing and Future Leaders
- Firefighter Recruitment/Diversity & Inclusion
- Vacancy Fill Process/Overtime
- Public Engagement
- Public Education
- Building Inspections and Pre-Incident Planning
- Fall Prevention
- Firefighter Wellness
- Complex Facilities Response
- Cultural Awareness



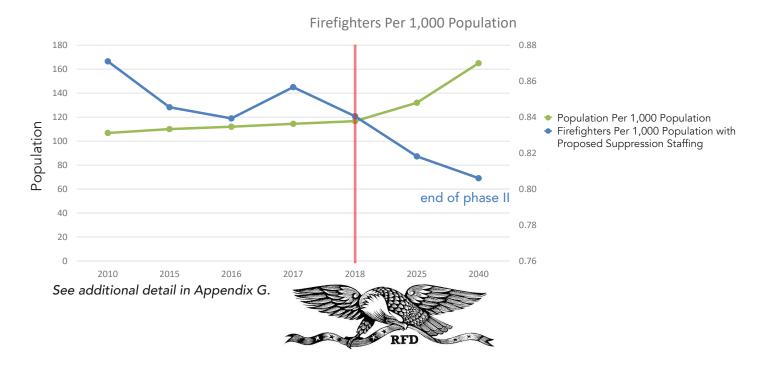
# **SUMMARY**

The Rochester Fire Department is at a tipping point. We have real needs now, but most of our needs will come in the future tied to projected City growth. We can anticipate our call volume based on past experience coupled with population growth predictions. We are confident in our predictions if our current demographics do not change. We are also confident that demographics will change.

We have identified 5 major risks to the community from our mission perspective. These risks are real and not designed to be scare tactics. The mitigation measures proposed are not artificially inflated in the hopes of negotiating something less. The mitigation measures proposed in Phase I are actual needs we have now and requirements to prepare for future growth. Phase II is based on projected City growth, and resources will be requested when needed based on actual demand. We fully understand that building the infrastructure to support the growth we are experiencing, and predict, will be a challenge to fund. We have outlined what we feel is a pragmatic approach to build the capability needed over a long period of time.

We recommend taking a "wait and see" attitude to assess the need for, and location of, future stations based on the impacts of City growth. What you can expect from us is an annual update of what is really happening out on the street. We will refine our predictions annually, enabling the City to plan based on facts.

We are in the enviable position to choose the size of our fire department based on actual needs, rather than the needs of the past. The workforce growth we are asking for builds the capability necessary to address the five risks. If the City growth projections are accurate we need to begin preparing the department to support two additional companies after 2030. While we don't grow out of proportion to the population we serve, the mitigation measures recommended will ensure our capabilities keep up with the demands of the future while mitigating the real risks we have identified.



# APPENDIX A

Historical Calls For	Service (CFS)			
	Population	Population/1,000	CFS	CFS/1,000
2000	85,806	86	5,321	62
2010	106,769	107	7,275	68
2017	114,400	114	10,289	90
2018	116,600	117	10,016	86
June 2018-June 2019 (Post Algorithm)	117,700	118	9,552	81

# APPENDIX B

Calls for Service (CFS) Projection

We discovered over the past 20 years our CFS increased by one CFS per 1,000 population per year. This was applied to the City's population growth projections.

	Calls	for Service Projection					
	Population	Total CFS	Station #1	Station #2	Station #3	Station #4	Station #5
		Diverging +1 CFS Annually					
2019	118,800	9,623	4,985	1,366	1,732	3,253	1,203
2020	121,000	9,922	5,140	1,409	1,786	3,354	1,240
2021	123,200	10,226	5,297	1,452	1,841	3,456	1,278
2022	125,400	10,534	5,456	1,496	1,896	3,560	1,317
2023	127,600	10,846	5,618	1,540	1,952	3,666	1,356
2024	129,800	11,163	5,782	1,585	2,009	3,773	1,395
2025	132,000	11,484	5,949	1,631	2,067	3,882	1,436
2026	134,200	11,810	6,117	1,677	2,126	3,992	1,476
2027	136,400	12,140	6,288	1,724	2,185	4,103	1,517
2028	138,600	12,474	6,462	1,771	2,245	4,216	1,559
2029	140,800	12,813	6,637	1,819	2,306	4,331	1,602
2030	143,000	13,156	6,815	1,868	2,368	4,447	1,645
2031	145,200	13,504	6,995	1,918	2,431	4,564	1,688
2032	147,400	13,856	7,177	1,967	2,494	4,683	1,732
2033	149,600	14,212	7,362	2,018	2,558	4,804	1,777
2034	151,800	14,573	7,549	2,069	2,623	4,926	1,822
2035	154,000	14,938	7,738	2,121	2,689	5,049	1,867
2036	156,200	15,308	7,929	2,174	2,755	5,174	1,913
2037	158,400	15,682	8,123	2,227	2,823	5,300	1,960
2038	160,600	16,060	8,319	2,281	2,891	5,428	2,008
2039	162,800	16,443	8,517	2,335	2,960	5,558	2,055
2040	165,000	16,830	8,718	2,390	3,029	5,689	2,104

2,500 calls for service exceeded per company

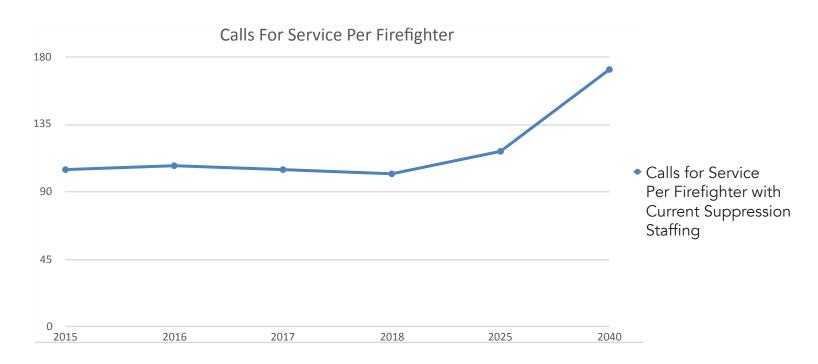


# APPENDIX C

### Recent and Predicted Calls for Service

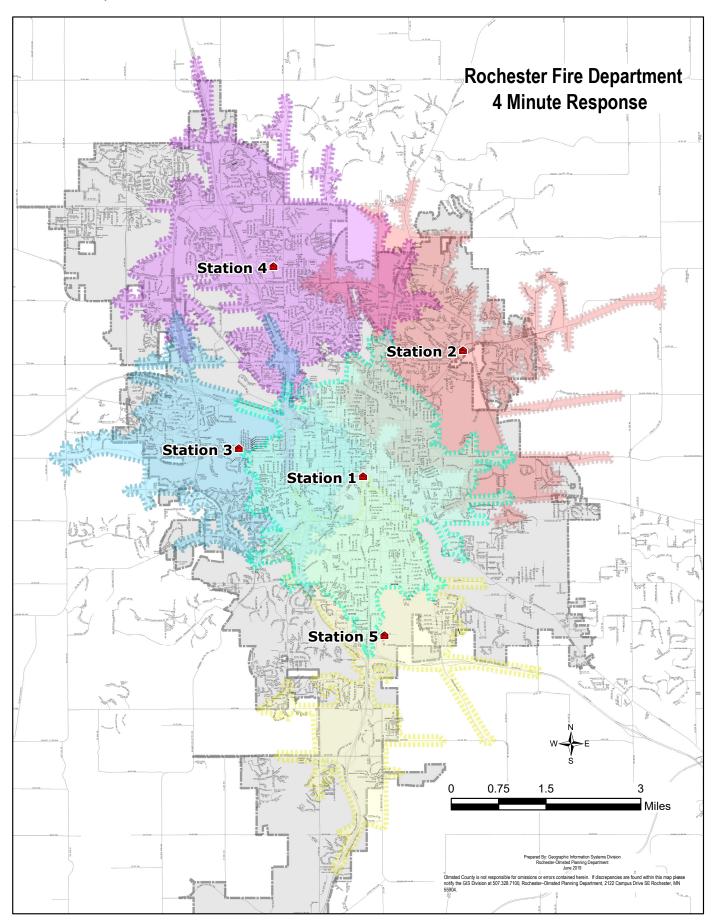
Historical Calls for Service Breakdown	2015	2016	2017	2018
Total Fires	237	192	167	166
Rescue/EMS Responses	6,338	6,644	6,840	6,631
HazMat and Other Hazardous Responses	168	171	166	200
Other Responses (Public Service, Assist LE, False Alarms, Mutual Aid)	3,022	3,107	3,116	3,019
Total Calls for Service	9,765	10,114	10,289	10,016
Suppression Staffing	93	94	98	98
Calls for Service per Firefighter	105	108	105	102

Predicted Calls for Service	2020	2025	2030	2040
Total Calls for Service	9,922	11,484	13,156	16,830
Current Suppression Staffing	98	98	98	98
Calls for Service per Firefighter	101	117	134	172



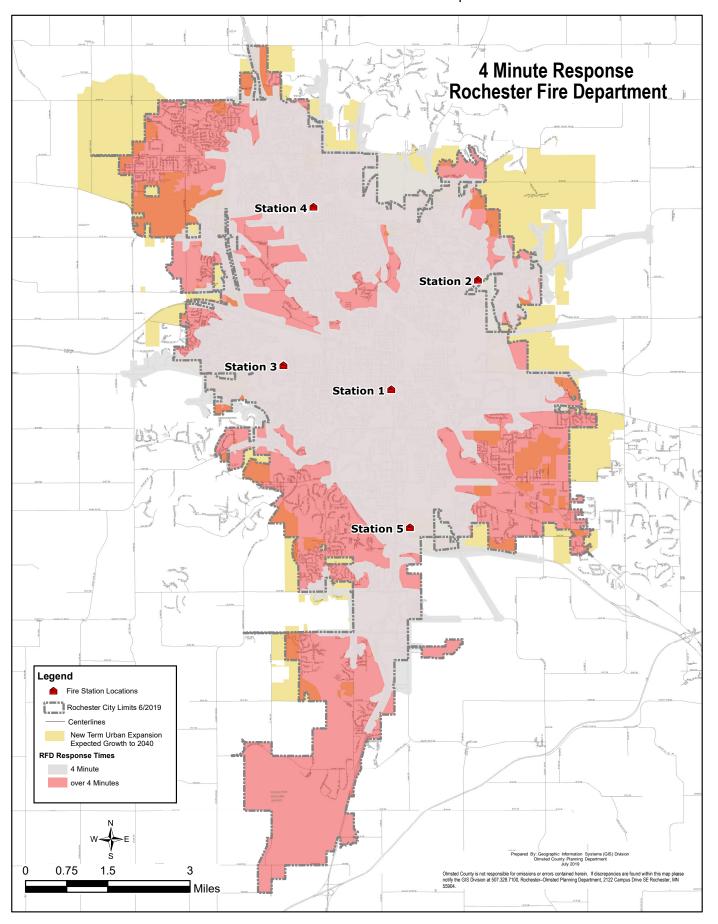
# APPENDIX D

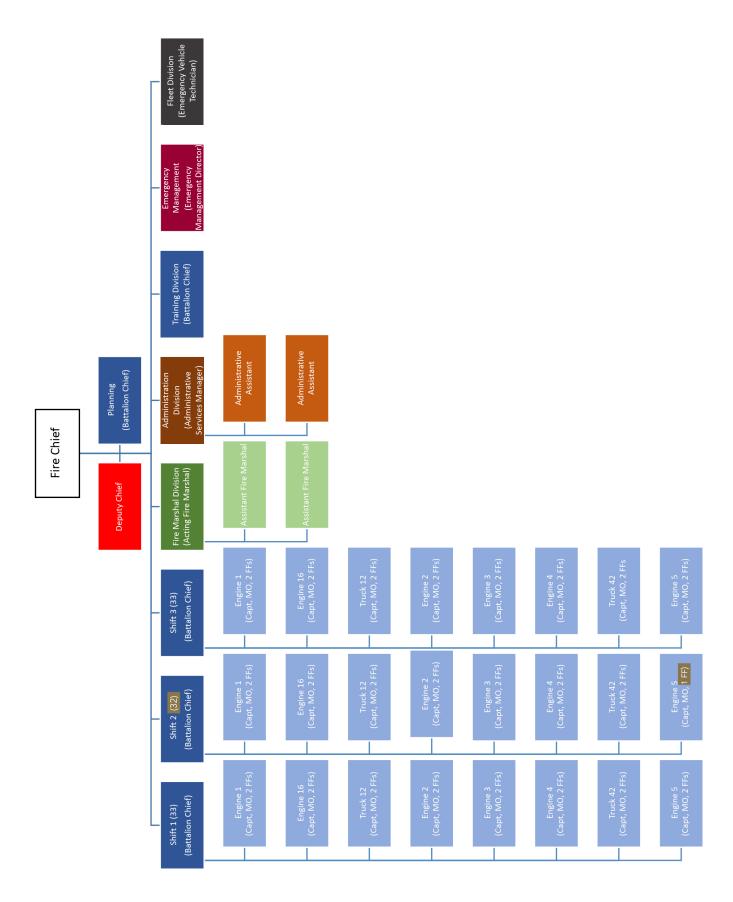
# Incident Response Times - Areas Covered



# APPENDIX D

### Incident Response Times - Areas Not Covered



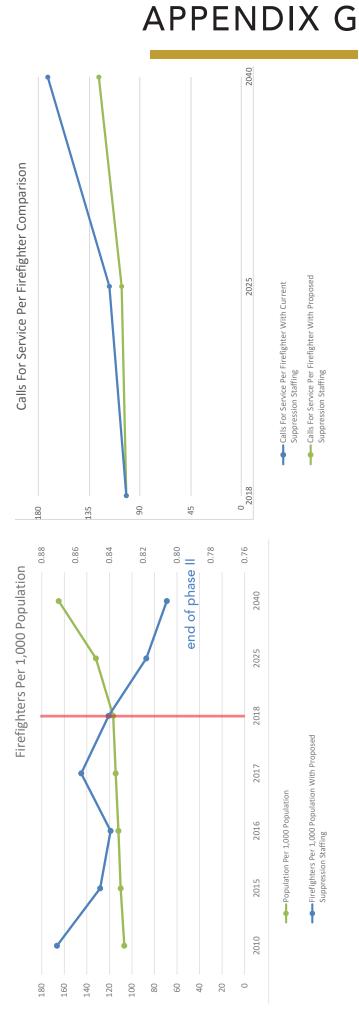


# APPENDIX F

# Risk and Mitigation Quick Reference

			(Final for Risk 3) -6 Captain		. , -,-
(2026-2040)	Impacts	<ul><li>Response Times</li><li>Calls for Service</li></ul>	Chief (Final)  2 Additional Companies-24 Firefighters	2033 Estimate 2033-2035	\$2,420,627
Phase II	5. City Growth	Maintain ISO 3 Rating     Response Times	Transition 3 BC Aides to BCs and 1 Assistant	After 2026 before	\$229,142
				Phase I Subtotal	\$1,595,127
		<ul><li>Support the Department</li><li>Control Overtime</li></ul>	1 Firefighter ***noted on p.13 (Non-Risk FTE)	2025	\$80,553
		Requirements	1 Assistant Vehicle Technician	2024	\$73,294
		System  • Meet Position	1 Emergency Management Captain	2024	\$129,617
	4. Divisions of One	1 Person Is Not a	1 Training Captain	2024	\$129,617
	3. Single Incident Capability	<ul><li>Need 10 teams</li><li>Protect Public</li><li>Protect Firefighters</li></ul>	6 Firefighters to add B-Teams (Interim)	2023	\$483,317
		<ul><li>Protect Firefighters</li><li>Protect Public</li></ul>			
	Salety	Dedicated Safety     Officer			
	2. Span of Control/ Safety	Battalion Chief (BC)     Span of Control	3 Captains for BC Aides (Interim)	2021	\$388,852
		Protect Firefighters			
		Protect the Public	Administrative Assistant I	2020	\$57,877
2020-2025)		<ul> <li>Dedicated Fire</li> <li>Marshal</li> </ul>	(Currently being considered in the 2020 budget)		

	Population	Positions Added	Population/1,000	Firefighters with Current Suppression Staffing	Firefighters With Proposed Suppression Staffing	Firefighters/1,000 Population Proposed Staffing	Calls For Service	CFS/FF Current Suppression Staffing	CFS/FF Proposed Suppression Staffing
2010	106,769		107	93	93	0.87	7,275	78	78
2015	110,000		110	93	93	0.85	9,765	105	105
2016	112,000		112	94	94	0.84	10,114	108	108
2017	114,400		114	86	86	0.86	10,289	105	105
2018	116,600		117	86	86	0.84	10,016	102	102
2025	132,000	3 BC Aide Captains 6 Firefighters (B-Team) 1 Firefighter (p.13)	132	86	108	0.82	11,484	117	106
2040	165,000	3 BC Aide Captains to BC 1 Assistant Chief 24 (2 Companies)	165	86	133	0.81	16,830	172	127



# APPENDIX H

#### RFD 2040 Organizational Chart

